

Message

From: Wu, Jennifer [Wu.Jennifer@epa.gov]
Sent: 10/22/2019 8:47:54 PM
To: Merz, Martin [merz.martin@epa.gov]
Subject: RE: Taking Composite samples

Hi Martin, the email looks good. Re: ammonia, it should be the permittee who decides whether there's a potential for ammonia in their discharges, but for the other permit applications, they sampled for ammonia in all their outfalls. Where the ammonia would come from, I'm not sure! But it looks like the Corps opted to sample for ammonia as opposed to fecal coliform where they didn't sample because the discharge was not applicable.

Jenny Wu
Environmental Engineer, NPDES Permits Section
EPA Region 10
1200 6th Avenue, Suite 155 (19-C04)
Seattle, WA 98101
206-553-6328

-----Original Message-----

From: Merz, Martin <merz.martin@epa.gov>
Sent: Monday, October 21, 2019 8:15 AM
To: Wu, Jennifer <Wu.Jennifer@epa.gov>
Subject: RE: Taking Composite samples

Hi Jenny, see my draft email to Marshall. Does it look about right to you?

My main remaining question is: when is ammonia data applicable to an outfall? Should it be collected for every outfall?

--

Hi Marshall,

I want to clarify a few more things. The directions in Form 2E, page 3 say you need grab samples for oil and grease, pH, temperature, total residual chlorine, and fecal coliform. Note that for fecal coliform, if you don't believe it's present in your discharge or will be discharged (Question 4.3), you don't need to sample for fecal coliform. It says that everything else must be composite.

I think you're aware that TOC and COD samples should be collected from cooling water related outfalls. In some cases you may also be sampling for ammonia. These should be composite samples because they're not in the list of pollutants that only require a single grab sample from Form 2E. But when you're collecting the composite, you can collect at least 4 grab samples in the 24-hour period and combine them to get a composite sample. They should be representative of different flows or times of days that the effluent may change. It's okay to collect samples over the working day, unless operations are very different outside of the working day.

In the cases that EPA is allowing representative sampling, to fill out the form, complete section 1.1 by listing the outfall that was sampled and the other outfalls that are being represented by the sampled outfall. In section 4.1, check the box noting that you are requesting a waiver. When you begin filling out the forms for these outfalls, we can discuss this by phone to make sure you are filling them out correctly.

Don't hesitate to call to clarify anything.

Best,

Martin Merz
Physical Scientist - EPA Region 10
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206-553-0205

-----Original Message-----

From: Wu, Jennifer <Wu.Jennifer@epa.gov>
Sent: Thursday, October 17, 2019 4:52 PM
To: Merz, Martin <merz.martin@epa.gov>
Subject: FW: Taking Composite samples

FYI! Have a great weekend!

Jenny Wu
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-----Original Message-----

From: Wu, Jennifer

Sent: Thursday, October 17, 2019 4:51 PM

To: 'Stearns, Joshua J CIV (USA)' <Joshua.J.Stearns@usace.army.mil>

Cc: Puyleart, Benjamin J CIV USARMY CENWS (US) <Benjamin.J.Puyleart@usace.army.mil>; Vandenbark, Troy M CIV USARMY CENWS (USA) <Troy.M.Vandenbark@usace.army.mil>

Subject: RE: Taking Composite samples

Hi Josh,

As we talked about today, TOC and COD should be composite samples because they're not in the list of pollutants that only require a single grab sample from Form 2E. But when you're collecting the composite, you can collect at least 4 grab samples in the 24-hour period and combine them to get a composite sample. They should be representative of different flows or times of days that the effluent may change. It's okay to collect samples over the working day, unless operations are very different outside of the working day.

Re: the unwatering sump and drainage sump, if you feel like grab samples are going to be exactly the same as the composite, I would need more information about the sumps and operations which show that the samples within a 24-hour period would be the same or not appreciably different. That is so I'd have a basis to evaluate whether to grant a waiver.

For baseline data, you could certainly collect all the parameters that are in the permit application. It's helpful for me as I write the permit and fact sheet, which explains why permit limits and conditions are or aren't needed. The Lower Columbia and Lower Snake River dam Corps applications included influent monitoring for temperature, pH, BOD, TSS, COD, TOC, ammonia, oil and grease, and PCBs.

Shoot me other questions you have or give me call. Thanks!

Jenny Wu

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-----Original Message-----

From: Stearns, Joshua J CIV (USA) <Joshua.J.Stearns@usace.army.mil>

Sent: Thursday, October 17, 2019 3:39 PM

To: Wu, Jennifer <Wu.Jennifer@epa.gov>

Cc: Puyleart, Benjamin J CIV USARMY CENWS (US) <Benjamin.J.Puyleart@usace.army.mil>; Vandenbark, Troy M CIV USARMY CENWS (USA) <Troy.M.Vandenbark@usace.army.mil>

Subject: Taking Composite samples

Jenny,

I sent an email yesterday asking if TOC, and COD need to be composite. In addition to that question, we are wondering if we can manually collect 4 samples of the same volume per sample port over the 24 hour period and then combine those 4. Is that an acceptable method of gathering a composite sample?

Also the unwatering sump and drainage sump are not continuous discharges during a day. In order to collect a sample from them we will turn on the discharge pump then off when done. The water will sit in the sump till the next time in the 24 hour period we turn it on to get a sample. So I am not sure there is going to be any real difference between a grab sample on those and a composite. The drainage sump may gain some fluid from what has leaked by the top plate on the generating units throughout the day but not much. Should we still do composite on those?

Josh Stearns

Safety, Health, and Environmental Compliance Coordinator

H U.S. Army Corps of Engineers

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